ABSTRACT

Provided are a histamine-H3 receptor antagonist; and a preventive and/or a remedy for metabolic system diseases such as obesity, diabetes, hormone secretion disorder, hyperlipemia, gout, fatty liver; circulatory system diseases, for example, stenocardia, acute/congestive cardiac insufficiency, cardiac infarction, coronary arteriosclerosis, hypertension, nephropathy, sleep disorder and various diseases accompanied by sleep disorder such as idiopathic hypersommnia, repetitive hypersommnia, true hypersommnia, narcolepsy, sleep periodic acromotion disorder, sleep apnea syndrome, circadian rhythm disorder, chronic fatigue syndrome, REM sleep disorder, senile insomnia, night worker sleep insanitation, idiopathic insomnia, repetitive insomnia, true insomnia, electrolyte metabolism disorder; and central and peripheral nervous system diseases such as bulimia, emotional disorder, melancholia, anxiety, epilepsy, delirium, dementia, shinzophrenia, attention deficit/hyperactivity disorder, memory disorder, Alzheimer's disease, Parkinson's disease, sleep disorder, recognition disorder, motion disorder, paresthesia, dysosmia, epilepsy, morphine resistance, narcotic dependency, alcoholic dependency. The histamine-H3 receptor antagonist comprises a piperidine derivative compound of formula (I) [wherein X¹ and X² independently represent a nitrogen atom or CH; Y represents a specific group; X³ represents O_s-(CH₂)_m; R¹ and R² independently represent a hydrogen atom, a halogen atom, a linear or branched lower alkyl group, a lower alkoxy group, or an acetyl group substituted with 2 or 3 fluorine atoms; s is 0 or 1; and m is an integer to make (m+s) 0 or from 1 to 4], or its pharmaceutically-acceptable salt.

$$\begin{array}{c|c}
R^1 & R^2 \\
\hline
N & X^3
\end{array}$$
(1)